### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018520 Address: 333 Burma Road **Date Inspected:** 08-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 1000 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1830

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** William Sherwood **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder

#### **Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 6W/7W bottom plate 'D1' inside, QA randomly observed ABF/JV qualified welder Fred Kaddu ID # 2188 perform CJP groove welding first time repair. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The two repair excavations located at (D1) Y-dimension 530mm having excavation profile of 120mm long x 25mm wide x 9mm deep and at (D1) Y-dimension 1400mm having excavation profile of 100mm long x 20mm wide x 10mm deep were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC William Sherwood was noted monitoring the welder. Prior welding, ABF QC William Sherwood was also observed performing Magnetic Particle Testing (MT) using Parker Contour Probe electromagnetic yoke. At the end of the shift, both repairs were completed.

At OBG 6W-PP46.5-W5-S deck access hole infill plate to top deck plate inside, ABF welder Jorge Lopez was observed back gouging using carbon air arc. After partially completing the back gouging, the welder started grinding the groove of the gouged area using 4 1/2" disc grinder. At the end of the shift, grinding on the groove of the gouged area was still continuing and should remain tomorrow.

At OBG 4E/5E LS1, LS2 & LS3 longitudinal stiffeners inside, this QA performed 10% MT verification on the

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

welded splice butt joint. QA found no indications during the verification. Please see TL-6028 report for more information.

At the job site, bad weather/heavy rain was experienced and due to this, welding activities were minimal. ABF has also shortened the work hours of their personnel to eight hours.





### **Summary of Conversations:**

No significant conversation today.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer